CAPITAL IMPROVEMENT PROGRAM
City of Missoula CIP Project Request Form FY 2015-2019

Program Category:	Project Title:	13 Project #	14 Project #	15 Project #
Community Service	Central Maintenance Buildings, Tools, and Fence	CS-09		

Description and justification of project and funding sources:

Funding this project will upgrade the central maintenance site at 1305 B Scott Street. This project is proposed to proceed as follows:

FY 14- FY15

Purchase design build for covered heated equipment storage building. ($32,000)
Remove old wooden pole shed.

Build heated equipment storage building. (pending design build cost estimated ($640,000). The design build will solidify this estimate. This funding is shown in FY 15. There is a possibility it will begin in FY 14 based on the finance departments request to complete this project as soon as possible.
Complete south section of fence. This should be no cost to the City, MRL is building the fence pending the easement agreement.

Purchase and install one 6 piece hoist tower set for lifting large trucks. This will enable us to lift large trucks and make underside repairs ($42,500).
Purchase one trolley jack for our existing small truck hoist ($5,000) This will enable us to lift the front and rear axles of vehicles on the ramp hoist.

Is this equipment prioritized on an equipment replacement schedule?	Yes	No	NA
			x

Are there any site requirements:

The addition of the heated equipment storage building is pending DEQ's release to begin construction. DEQ has given verbal permission to remove the old structure. Final DEQ approval is based on their review of the soil samples.

REVENUE

How is this project going to be funded:

Funding Source	Accounting Code	FY15	FY16	FY17	FY18	FY19	Funded in Prior Years
General Fund Bond- Road District 70%			495,500				**401,066**
Impact fees 30%			192,000				
		-	687,500	-	-	-	**401,066**

EXPENSE

How is this project going to be spent:

Budgeted Funds	Accounting Code	FY15	FY16	FY17	FY18	FY19	Spent in Prior Years
A. Land Cost	4060.390.430221.940						
B. Construction Cost	4060.390.430221.940	640,000					**369,066**
C. Contingencies (10% of B)	4060.390.430221.940						
D. Design & Engineering (15% of B)	4060.390.430221.940						**32,000**
E. Percent for Art (1% of B)	4060.390.430221.940						
F. Equipment Costs	4060.390.430221.940	47,500					
G. Other	4060.390.430221.940						
		687,500	-	-	-	-	**401,066**

OPERATING BUDGET COSTS

Does this project have any additional impact on the operating budget:

Expense Object	Accounting Code	FY15	FY16	FY17	FY18	FY19	Spent in Prior Years
Personnel							
Supplies							
Purchased Services	321.431350.341	25,000					
Fixed Charges							
Capital Outlay							
Debt Service							
		25,000	-	-	-	-	**-**

Description of additional operating budget impact: The utilities will increase by about $25,000. This is a very rough estimate and can be adjusted after the first year of operation.

Responsible Person:	Responsible Department:	Date Submitted to Finance	Today's Date and Time	Preparer's Initials	Total Score
Jack Stucky	**321--Veh. Maint.**	**3/3/2014**	3/3/2014 0:00	js	44

CAPITAL IMPROVEMENT PROGRAM

Project Rating

(See C.I.P. Instructions For Explanation of Criteria)

Program Category:	Project Title:		10 Project #
Community Service	Central Maintenance Buildings, Tools, and Fence		

Qualitative Analysis	Yes	No	Comments
1. Is the project necessary to meet federal, state, or local legal requirements? This criterion includes projects mandated by Court Order to meet requirements of law or other requirements. Of special concern is that the project be accessible to the handicapped.		X	
2. Is the project necessary to fulfill a contractual requirement? This criterion includes Federal or State grants which require local participation. Indicate the Grant name and number in the comment column.		X	
3. Is this project urgently required? Will delay result in curtailment of an essential service? This statement should be checked "Yes" only if an emergency is clearly indicated; otherwise, answer "No". If "Yes", be sure to give full justification.		X	
4. Does the project provide for and/or improve public health and/or public safety? This criterion should be answered "No" unless public health and/or safety can be shown to be an urgent or critical factor.		X	

Quantitative Analysis	Raw Score Range	Raw Score	Comments	Weight	Total Score
5. Does the project result in maximum benefit to the community from the investment dollar?	(0-3)	2	This project was created to improve the response time of vacuum, snow, and street sweeping equipment. See attached support pages.	5	10
6. Does the project require speedy implementation in order to assure its maximum effectiveness?	(0-3)	2	There is a significant health concern associated with starting multiple (5-15) diesel engines in the shop and letting them run to build up air brake pressure. The HVAC system cannot compensate fast enough. As the HVAC system brings in mass quantities of fresh air, the heating units have to bring that air back up to room temperature. This creates an unhealthy costly venture. The fence portion of this project reduces the City exposure to vandalism, theft, and liability associated with children getting hurt on City equipment.	4	8
7. Does the project conserve energy, cultural or natural resources, or reduce pollution?	(0-3)	2	Covered vehicles and equipment conserve energy, reduce pollution. Covering construction equipment, contributes significantly to a reduction in ground water pollution. The heated storage will store sweepers and flushers to keep them from freezing and enable them to respond timely to winter sand and airborne particulate issues. Engine heaters use close to 1,000 amps and are left plugged in outside all winter. There is an energy saving to heat the environment to 45 degrees or 50 degrees instead of plugging equipment in or bringing the units into the existing shop at 65 degrees. Equipment groundwater run off with be reduced and contained in the covered storage buildings.	3	6
8. Does the project improve or expand upon essential City services where such services are recognized and accepted as being necessary and effective?	(0-2)	2	This project will improve the response times of the vehicles and equipment stored at the Central maintenance Facility. This includes sweepers, flushers, construction equipment, aerial lift trucks, snow plows, and street maintenance equipment such as pothole patchers and vacuum trucks. This project supports and enhances all of the essential City services that rely on the Central Maintenance facility.	4	8
9. Does the project specifically relate to the City's strategic planning priorities or other plans?	(0-3)	3	Strategy: We will maintain the level of service to citizens; this project will "increase organizational responsiveness internally and externally, including emergency preparedness". This project is about asset preservation and improved response to public service.	4	12
				Total Score	44

FY14 CIP#: CS-09

CENTRAL MAINTENANCE FACILITY VEHICLE BUILDINGS COST AND BENEFIT CONCERNS

RESPONSE TIME	Digging equipment out of the snow, cleaning it off, and thawing it out to be put to work takes time. Time that is response time. Response times to snow removal, street sweeping, aerial lift trucks (signs, signal lights, trees etc.), and pothole patch equipment can be reduced by keeping this equipment covered and heated. Street sweepers, flushers, vacuum trucks, and Jetter equipment are stored wet and ready to use. They have to be stored in a heated facility to prevent freezing damage to the expensive pumps, blowers, and tanks. Draining these units prior to and after each use is often nearly impossible and adds significantly to response times.
GROUND WATER POLLUTION	Equipment that is exposed to the elements contributes to ground water pollution. Rain washes fuel, oil, hydraulic fluids and coolant off of equipment and into the storm drains. Exposure to sunlight contributes to premature failure of hoses and fittings, resulting in leaks and spilled fluids.
WEATHER DAMAGE	Equipment that is stored in a covered facility is less likely to be damaged by hail and other severe storms. Direct sunlight contributes to the premature failure of paint, rubber, interiors, and tires. UV light shortens equipment and equipment component life cycles. Tire dry rot and sidewall weathering costs thousands of dollars each year. Dash assemblies, steering wheels, and seats deteriorate in the direct sun and fluctuating temperatures.
EMPLOYEE SAFETY	Employees trying to ready snow covered equipment are not only slower to respond, but more likely to be subjected to slip, trip, and fall injuries. Cleaning windshields, glass, and checking fluids on large snow covered units is an invitation to an accident.
EMERGENCY PREPAREDNESS	The City of Missoula depends on emergency response units everyday. Aerial lift trucks respond to down trees and inoperative street lights. Sanders, deicers, and other snow removal equipment respond to freezing rain or sudden snow storms. Loaders and trucks respond to blocked roads and fallen trees. All of these emergency response times can be reduced with covered vehicle storage. In some extreme conditions, the length of the response time can save lives.
INDOOR AIR QUALITY	Currently, all of the seasonal, response, and wet equipment is jammed into the north end of the City shop. This slows down response times. Moving equipment to try to get to the needed vehicle creates a significant indoor air quality issue. Starting sweepers, plows, aerial trucks, and pothole patch trucks and running them long enough to build up the air system to release the brakes creates a great deal of exhaust. The operators and shop employees have to breathe these fumes until they can be vented outside. Vented fumes are replaced with air at ambient temperatures. This results in energy cost to heat the air up to 65-70 degrees.
HEATING ENERGY COSTS	Heating equipment storage facilities to 45-50 degrees to keep equipment from freezing is less expensive than storing it in the shop and bringing the indoor air temperature up to 65-70 degrees each time a unit enters or leaves the shop.
ACCIDENTS	The tight quarters on the North end of the shop promotes collisions with both vehicles and building structures. These accidents are costly in terms of labor, parts and down time.

FISCAL YEAR	DEPT \ DIVISION	VEHICLES AND EQUPMENT REQUIRING HEATED STORAGE	# OF UNITS	NET INCREASE AND FUTURE GROWTH	HEATED STORAGE BAYS NEEDED	ADDITIONAL INFORMTION
FY 2002	290	Swat Van	0			
FY 2011	290	Swat Van	1	1	1	
Future Growth	290	Swat Van	1	1	1	
				2	2	In 2002 we had one swat trailer. We now have a swat van, a bomb trailer, and several other police training and emergency trailers that will require covered storage for sure and heated storage for the rapid response units.
FY 2002	320	Front Line Street Sweepers	3			
FY 2011	320	Front Line Street Sweepers	4	1	5	
Future Growth	320	Front Line Street Sweepers	1	1	1	
				2	4	There are 11 sweepers total we are only requesting heated storage for the front line sweepers. The remaining sweepers can be winterized and stored in covered storage.
FY 2002	290	Police Patrol Motor Cycles	4			
FY 2011	290	Police Patrol Motor Cycles	6	2		
Future Growth	290	Police Patrol Motor Cycles	0			
				2	0.50	Police patrol bikes have been stored in a multitude of locations each with negative results. For the past 4 plus years we have stored them in the shop. This has reduced damage and lost components while keeping them in a ready safe condition.
FY 2002	320	Pothole Patch Trucks and Crack Sealer	2			
FY 2011	320	Pothole Patch Trucks and Crack Sealer	3	1		
Future Growth	320	Pothole Patch Trucks and Crack Sealer	1			
				1	2	Crack sealers and Pothole patch trucks will require heated storage. Most have patch products that cannot or should not drop below 40 degree temperatures.
FY 2002	322-370	Aerial Lift Trucks / Grapple Truck	2			
FY 2011	322-370	Aerial Lift Trucks / Grapple Truck	3	1		
Future Growth	322-370	Aerial Lift Trucks / Grapple Truck	1			
				1	3	Aerial Lift Trucks respond to emergency lighting, sign, and tree issues and require heated storage.
FY 2002	320-322-370	Small Snow Removal Equipment	9			
FY 2011	320-322-370	Small Snow Removal Equipment	14	5		
Future Growth	320-322-370	Small Snow Removal Equipment	3			
				5	2	This storage includes ATV's, UTV's, and mowers that are converted to winter snow plows. Heated storage space would significantly improve the winter snow removal response time. Covered storage will be adequate for much of this equipment, however, for the equipment doing the bridges, heated storage is currently being used.
FY 2002	320	Road Graders	2			
FY 2011	320	Road Graders	2	0		
Future Growth	320	Road Graders	0			
				0	1	In the past both of the road graders were stored in heated storage. Now they are both exposed to the elements. The increase in weather damage to these extremely expensive units is becoming evident. Covered storage with electrical access is a minimal requirement, heated storage would improve the winter response times significantly. The large hydraulic systems on road grader take a significant amount of time to get to operating temperatures.
FY 2002	320	Front End Loaders	3			
FY 2011	320	Front End Loaders	4	1		
Future Growth	320	Front End Loaders	1			
				1	2	These units are essential to all phases of snow removal. Minimally one should be stored in heated storage for timely response. Ideally 2 should be in heated storage and the remainder of the loader fleet stored in covered storage.
FY 2002	320	Anti-Ice Deicer Trucks	5			
FY 2011	320	Anti-Ice Deicer Trucks	5	0		
Future Growth	320	Anti-Ice Deicer Trucks	1			
				0	2	Storing 2 deicer units in heated storage would significantly improve response time to ice storms. The remaining 7-9 units should be stored in covered storage with electrical access.
FY 2002	320	Sander trucks	5			
FY 2011	320	Sander trucks	6	1		
Future Growth	320	Sander trucks	2			
				1	6	These unit require heat to keep the sand from freezing in the loaded units and to promote rapid response to snow removal services off the valley floor.
FY 2002	320	Vacuum Trucks	1			
FY 2011	320	Vacuum Trucks	1	0		
Future Growth	320	Vacuum Trucks	1			
				0	1	This unit response to spill, water, plugged sumps etc. We currently drain it for winter use and reactivate it each time it is called for service. Covered storage is minimal, heated storage is ideal for improved service response.
FY 2002	320	Flusher Trucks	1			
FY 2011	320	Flusher Trucks	2	1		
Future Growth	320	Flusher Trucks	1			
				1	1	These flusher units compete with sanders and sweepers for space on the North end of the shop. They are essential to the sweeping program. Storing one in heated storage and the others in covered storage would improve the sweeping program and preserve the equipment. We frequently loose components to frost damage.

	Sqr' per bay			
Total Number Heated 20X10 Bays	200		35	Total Square Feet Needed 6,900
CIP Requested Heated storage Space	200		34	6,800
	31.68%	attributable to growth	1	Net Heated Storage Difference 100

The remainder of the equipment requiring heated storage including some materials will have to continue to be stored in the North end of the shop. This will allow us to select the least used of this group to reduce the air quality issues in the shop. Based on the rate of growth and changes in service a second heated storage unit will probably need to be built on or about 2025. Please note, the requesting heated storage facility is enabling us to deal with our current growth rate. Should the growth rate in Missoula increase it may become necessary to add additional storage sooner than we have planned.